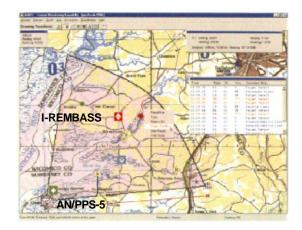
The New System



In response to the soldiers needs, CECOM has initiated an upgrade to the AN/PPS-5 via the Modernization through Spares concept. The existing system contains over 150 spare parts, many of which are obsolete. Utilizing DSP technology, the modernization effort will reduce the number of spares to less than 15 and additionally, will improve the capabilities of the system. Thirteen out of fifteen systems are COTS NDI items, with the other two being designed inhouse. All new spares are being delivered in Intelligent Data format which will prevent obsolescence from becoming an issue in the future. Intelligent Data also aids in the prevention of sole source commitments.



I-REMBASS



Additional savings will be achieved as we integrate the AN/PPS-5 with the I-REMBASS program through:

- · commonality of assets
- commonality of training
- commonality of logistic support
- · common collection of detection data in the field
- ASAS compliant

Team C4IEWS

Specs and Standards Acquisition Reform Team











Team C4IEWS Standards Improvement Program Execution Through Partnership of AMC and PEO Organizations

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AN/PPS-5

Ground Surveillance Radar Upgrade **Program**



"Improving Yesterday's Systems with Today's Technology"



The Present System



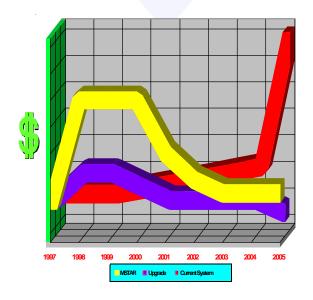
The AN/PPS-5 Ground Surveillance Radar is a thirty-five (35) year old system. Since the late 1980's, soldiers have been complaining about the need for a new radar system. The system has been around since the Vietnam War having been designed with 1950's technology. Additional upgrades to the radar have not been executed since the 1970's. Obsolescence of spare parts and a changing work environment have created a desperate need for an improved radar that can be more readily and cost effectively sustained.



Cost Savings

Attempts to procure a new radar system have become a futile effort as the best known commercially available system would cost in excess of \$100 million to retrofit our entire fleet. The cost to perform this upgrade will be approximately \$15 million.

The return on investment for the upgrade is 3 to 1 when compared to current sustainment costs. The cost to sustain the current system continually rises, and eventually will reach a point of non-supportability. After the initial investment in the upgrade, with a payback of only 2.2 years, sustainment costs will gradually decline.



Comparison

Additional benefits arising from the upgrade are:

- An open architecture design which will enable ease of implementation for future upgrades.
- Improved maintenance concept creating less time to repair and lower maintenance costs.
- Software driven system reducing training requirements as well as built in TM's to provide sustainment training.
- Total reduction in all Logistics costs.

| | AN/PPS-5B | AN/PPS-5 Upgrade |
|--------------------|-----------------------------------|------------------------------------|
| Power Input: | 65W | >50W |
| Detection Range: | 5KM (Personnel) 10KM (Vehicle) | 10KM (Personnel) 20KM (Vehicle) |
| Source RF Energy: | Magnetron (Tube) | Solid State |
| Weight: | 125 Lbs. | 70 Lbs. |
| A _o : | 75% | 100% |
| Life Cycle: | 2005 | Indefinite |
| Target Detection: | Audio | Audio&Visual Tracking |
| Fall-of-Shot Mode: | NO | YES |

Team C4IEWS will provide the users:

- A Low Cost
- State-of-the-Art
- Reliable
- Maintainable
- Sustainable
- Open Architecture
- Fielded
- Man Portable Surveillance Radar System

AN/PPS-5B

AN/PPS-5 Upgrade

Power Input: 65W >50W

Detection Range: 5KM (Personnel) 10KM (Personnel) 10KM (Vehicle)

Source RF Energy: Magnetron (Tube) Solid State

Weight: 125 Lbs. 70 Lbs.

A_o: 75% 100%

Life Cycle: 2005 Indefinite

Target Detection: Audio Audio Audio Tracking

Fall-of-Shot Mode: NO YES

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